THE ALMOND BOARD: A TRUSTED RESOURCE

ABC is a trusted resource for data and industry expertise, providing stakeholders with valuable information on matters impacting the entire California almond industry.

As a Federal Marketing Order, ABC is precluded from any lobbying or advocacy activities meant to influence legislation or specific policies. However, USDA/AMS does not restrict ABC's ability to pursue many opportunities to share its expertise and fact-based information with government and other stakeholders.

In other words, ABC can ***educate*** but not ***advocate***.

To further engage on legislation or policy-related matters, ABC staff provide consulting expertise to the Almond Alliance of California, supplying valuable input in support of the Alliance's efforts to ensure the California almond industry has "a seat at the table" with legislators and policymakers.

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TRADE AND TARIFFS

- Since more than 70% of California almonds are exported to at least 100 countries, unimpeded market access is critical.
- Almonds are the #2 ag export to the EU ($1.6 billion) and the #1 ag export to India ($824 million), accounting for 47% of all U.S. ag exports to India.
- ABC is closely monitoring the EU's Green Deal Policies that could restrict imports in the future.
- Higher retaliatory tariffs remain in key export markets; particularly in China, where the tariff increased from 10% in 2018 to 55% in 2020.
- Chinese importers are allowed a waiver on Section 301 retaliatory tariffs, which allows them to import almonds at 25% vs 55% -- other countries are subject to the MFN tariff rate of 10%.
- While the U.S.-Japan Phase One Agreement lowered tariffs on almonds to 0%, tariffs on a number of processed almond products are still to be phased out.
- Turkey and India also implemented retaliatory tariffs in response to U.S. steel and aluminum tariffs.
- ABC is closely following trade negotiations which are anticipated to get underway between the U.S. and India, as well as the U.S. and the UK. California almonds are present in a number of ag coalitions which amplify concerns related to almond production practices, trade impacts, technical issues, and potential benefits associated with proposed trade agreements.

EXPORTS AND INCREASING TECHNICAL ISSUES

- Technical advisors and experts in key markets keep ABC updated on tariff or technical issues impacting almonds.
- Technical Barriers to Trade are becoming more common, ranging from pesticide MRLs to labeling to certification requirements, all of which can disrupt almond shipments.
- ABC participates in Codex Committee meetings dealing with technical issues including food contaminants, pesticides, import procedures and labeling.
- ABC is viewed as a resource by government authorities in the U.S. and abroad, for its wide-ranging, fact-based information concerning agricultural practices and trade flows.
- Over the last two years, ABC has provided more than 25 comments to EU, U.S., and global authorities that demonstrate the almond industry's responsible use of chemical tools.
- ABC continues to closely monitor the new administration's position on trade negotiations that will most likely place a greater emphasis on labor and environmental issues.
- California almonds are the only U.S. commodity recognized under the EU's Pre-Export Certification (PEC) regulation, which specifies < 1% inspection on import.
- ABC continues to work with USDA Foreign Agricultural Service to address Japan's 100% import control of almonds.
- Efforts are underway with USDA and FDA to recognize USDA-approved labs for aflatoxin inspection to streamline import/reconditioning procedures for returning consignments.

CLIMATE SMART AGRICULTURE

- California's state government and the almond industry have been leading the way toward mitigating emissions and sequestering carbon in working lands.
- Almond trees store carbon as they grow; the utilization of the almond hull and shell co-products, together with the woody biomass at the end of the orchard's lifespan, reduces the carbon footprint of almond growing by nearly 50%.
- The California almond industry has been an early investor in broadening its sustainability platform to include climate smart agriculture and improving its carbon footprint.
- Almond growers utilize incentive programs that support adoption of climate smart ag such as cover crops, composting, Whole Orchard Recycling, nutrient and irrigation efficiency, and engine replacement.
- ABC is exploring how to improve grower access to ecosystem services markets for practices that store carbon, foster biodiversity, and improve water quality and quantity.
- On-farm practice changes are documented through ABC's California Almond Sustainability Program (CASP), a set of nine self-assessment modules first launched in 2009.
- CASP is benchmarked with the Sustainable Ag Initiative's (SAI) Farm Sustainability Assessment 2.1 (FSA) international sustainability program; about 59% of sufficiently completed self-assessments are equivalent to a "Silver" or higher performance level.[1]

Some of California's Green House Gas funds are used in the Healthy Soils Program to incentivize practices in almonds, such as cover crops and pollinator hedgerows.

1. CASP. August 2021.

POLLINATOR HEALTH

- In 2021, over 110,000 acres of almonds, across 92 farms, have been certified as Bee Friendly Farms under Pollinator Partnership, requiring growers to provide diverse forage and habitat and practice integrated pest management.
- ABC led the launch of the California Pollinator Coalition together with international nonprofit Pollinator Partnership and the California Department of Food and Agriculture to launch. Together with 20+ other organizations which represent most of California's farmland, the coalition aims to expand pollinator habitat on working lands.
- In October 2021, the North American Pollinator Protection Campaign (NAPPC) presented its Business for Bees Sustainability Award -- an honor reserved for standout organizations that go above and beyond to support pollinators – to the ABC and the state's almond farmers.
- Beehives brought in to pollinate almonds consistently leave almond orchards stronger than when they arrived. Almond pollen is nutritious for bees and is their first natural food source of the year.[1]
- ABC's Honey Bee Best Management Practices, developed with key stakeholders, identify ways to protect both honey bee and native pollinator health during almond bloom and throughout the year.[2]
- USDA/Ag Research Service (USDA/ARS) researchers have found that a component in almond nectar and pollen can reduce honey bee viruses and gut parasites, which are some of the leading threats to bee health and colonies.

1. Elina Niño, University of California, Davis & Ramesh Sagili. Department of Horticulture. Oregon State University.
2. James Tauber et al. Colony-Level Effects of Amygdalin on Honeybees and Their Microbes. Insects. 2020.

KEY ISSUES & FAST FACTS 2021

california almonds
Almond Board of California

ALMONDS play a significant role in the overall health and well-being of our communities, consumers, environment, and economy. With more than 1.3 million bearing acres statewide, the California almond industry recognizes its role as a leader in California agriculture and global almond production, aiming to make life better by what we grow and how we grow.

California Almonds are…

- #1 U.S. specialty crop export.
- California's #1 ag export with a value of over $4.9 billion in 2019.
- California's second-largest commodity with a 2020 farmgate value of $5.6 billion.
- More than 80% of global almond production.
- Shipped to more than 100 countries.
- Creating more than 110,000 California jobs.
- 90% family farms – nearly 70% farming 100 acres or less.
- #1 nut in global new product introductions since 2007.

For additional information on key issues impacting the California almond industry, please contact regulatoryissues@almondboard.com

SHIPMENTS AND LOGISTICS

- Export logistical delays have had a significant impact on almond shipments and costs.
- Huge demand in the U.S. for manufactured imports from China and other Asian markets has led to carriers shipping more empty containers to China, cancelled ag export bookings, excessive ocean carrier fees, supply chain disruptions, and bottlenecks never before seen at California's maritime ports.
- Almost 85% of all almond exports ship from the Port of Oakland, with 15% from the ports of LA and Long Beach.
- Handlers using all three ports in mid-2021 reported delays of 1-2 months in getting product to overseas buyers.
- ABC is working closely with the Almond Alliance, ag coalitions and national organizations to educate public and private sector leaders on the export delay issues, as well as the consequences for almond shippers.
- Ports are responding with extended hours of operation; efforts are underway to move empty containers to other lands to free up terminal space.
- Bipartisan *Ocean Shipping Reform Act of 2021* legislation is the first comprehensive reform of the act since 1998 under discussion to address ocean transport and port services, as well as enhanced Federal Maritime Commission (FMC) enforcement.

WATER USE

- Almonds thrive in Mediterranean climates that alternate between wet cool winters and dry hot summers, mixed with years of drought or heavy precipitation.
- California's Central Valley is one of 5 regions in the world with the climate needed to grow almonds.
- California has well-developed water management infrastructure and regulations; implementation of the Sustainable Groundwater Management Act (SGMA) is currently underway.
- California agriculture largely relies on irrigation, and almonds are not unique in the amount of water used.
- Research funding has led to development and adoption of advanced irrigation technologies –83% of almond orchards use efficient micro-irrigation, allowing more precise scheduling of irrigation based on tree/soil needs and weather conditions.[1]
- Water-saving technologies and increased yields have helped growers reduce the amount of water it takes to grow a pound of almonds by 33% between 1994 and 2014.[2]
- ABC has funded 210 water research projects since 1982.
- ABC's Introduction to Groundwater Recharge guide demonstrates how growers can help sustainably manage California's vital water resources.
- The Almond Irrigation Improvement Continuum, launched in 2017 and based on ABC research and expert advice, is a mechanism for growers to improve water use efficiency.

Grower adoption of irrigation best practices is supported by California and federal incentive programs.

1. CASP. August 2021.
2. University of California. UC Drought Management. Feb. 2010. UN FAO. FAO Irrigation and Drainage Paper 66 – Crop yield in response to water. 2012. ABC Almond Almanac 1990-94, 2000-14.

AIR QUALITY

- Almonds are engaged in climate-smart agriculture practices such as Healthy Soils projects, while the trees themselves store carbon.
- The Almond industry has long worked to reduce impacts on air quality from dust, regulated particulate matter, ozone, and more recently greenhouse gases (GHG).
- The Managing Dust at Harvest toolkit, based on ABC-funded research, provides growers with techniques to reduce dust which include setting sweeper heads correctly and reducing the number of sweeper passes.
- New low-dust harvesting equipment reduces PM2.5 and PM10 dust emissions on average 50%.
- New off-ground harvest techniques are being explored that involve catching nuts before they reach the ground, eliminating the need to sweep and pick up from the orchard floor, further reducing dust at harvest.
- ABC-funded research is exploring potential economic and environmental benefits of off-ground harvesting as well as addressing hurdles to adoption, including orchard configuration, drying processes, technology, and equipment changes.
- With the end of most burning of ag waste by 2025 in the San Joaquin Valley, adoption of Whole Orchard Recycling is likely to expand, and new funding will help contractors purchase agricultural wood-chipping equipment.

Incentive funds through the Natural Resources Conservation Service and local air districts assist almond growers in transitioning to low-dust harvester equipment.[1]

1. William B. Faulkner. Harvesting equipment to reduce particulate matter omissions from almond harvest, Journal of the Air & Waste Management Assn. 2013.

PEST MANAGEMENT

- Successful pest management contributes to wholesome nuts as well as efficient use of water and other inputs.
- ABC has funded pest management research since 1973, providing almond growers with science-based, Integrated Pest Management (IPM) solutions for many pest problems.
- Most almond growers utilize IPM in their orchards, emphasizing the balanced use of nonchemical and chemical tactics to manage pests effectively and safely.[1]
- Recent IPM solutions developed with the support of ABC funding include pheromone-based mating disruption for key insect pests and assessing the value of cover crops for weed management and soil health.
- The California almond industry has been recognized for its success in adopting IPM strategies and for reducing pesticide use.
- ABC is engaging with registrants, industry, and government authorities to encourage a risk-based, harmonized approach to setting and evaluating pesticide Maximum Residue Limits (MRLs) at a global level. Strict MRLs in export markets can result in trade disruption.
- Growers report a more than 58% increase in the use of recommended pest management practices.[2]

NRCS offers cost-share grants for certain IPM practices, including mating disruption and orchard sanitation for Navel Orangeworm management.

1. CASP. August 2020.
2. CASP. August 2019.

ZERO WASTE

- Almonds grow in a shell, protected by a hull, on a tree. The almond kernel represents about 25% of the total almond "fruit."
- Applied water and other inputs not only support development of the almond nut, but also these other valuable coproducts.
- Research is identifying value-added benefits for this natural biomass – shells, hull, tree – produced in addition to the nut itself.
- Whole Orchard Recycling involves grinding up orchards at the end of their productive lives and incorporating the woody biomass into the soil. ABC-funded research indicates that over time this practice increases yields, returns nutrients to the soil, increases water infiltration and storage[1], and sequesters 2.4 tons of carbon per acre in the soil.[2]
- Almond hulls, shells and woody biomass can be reused in markets as diverse as industrial sorbents, soil amendments, food and cosmetic ingredients, pulp-based containers, and a variety of activated carbon and biochar products through pyrolysis or torrefaction. Leveraging both public and private investment can accelerate development of such markets, substituting higher GHG-intensive feedstock with agricultural biomass.
- ABC is working with USDA and the Almond Alliance to finalize market access in China for whole almond hulls, pellets and cubes to be used as livestock feed. Other global markets are also being explored.

A program in the San Joaquin Valley is incentivizing adoption of Whole Orchard Recycling; CDFA and NRCS are also offering incentives.

1. 16-PREC3-Holtz. Almond Orchard Recycling.
2. Alissa Kendall, et al. Lifecycle-based Assessment of Energy Use and Greenhouse Gas Emissions in Almond Production, Part 1: Analytical Framework and Baseline Results. Journal of Industrial Ecology. 2015.